

SEQUENCE LISTING

SEQ ID NO. 1 (WGA1), SEQ ID NO. 2 (WGA2), or SEQ ID NO. 3 (WGA3).

WGA1 (A) cDNA sequence:

5 atgaag atgatgagca ccagggcctt cgcgctcggc
61 gcggtgccg tctcgcctt cgcgcggcg accgctcagg cccagaggtg
cggcgagcaa
121 ggcagcaaca tggagtgcc caacaacctc tgctgcagcc agtacggcta
10 ctgcgggatg
181 ggcggcgact actgcggcaa ggcgtgccag aacggcgcct gctggaccag
caagcgctgc
241 ggcagccagg cggcgggcgc gacgtgcacc aacaaccagt gctgcagcca
gtacgggtac
15 301 tgcggcttcg gcgccagta ctgcggcgcc ggctgccagg gcggccctg
cgcgcgcgac
361 atcaagtgcg gcagccaggc cggcggaag ctgtgccga acaacctctg
ctgcagccag
421 tggggattct gcggcctcgg ttccgagttc tgcggcgcg gctgccagag
20 cgggtgcttg
481 agcaccgaca aaccgtgcgg caaggacgcc ggcggcagag tttgactaa
caactactgt
541 tgtagcaagt ggggatcctg tggcatcggc ccgggctatt gcggtgcagg
ctgccagagt
25 601 ggcggctgcg atggtgtctt cgcgaggcc atcaccgcca actccactct
tctccaagaa
661 tga

30 WGA1 (A) protein sequence:

MKMMSTRALALGAAAVLAFAAATAQAQRCGEQGSNMECPNNLCC
SQYGYCGMGDYCGKGCQNGACWTSKRCGSQAGGATCTNNQCCSQYGYCGFGAEYCGA
35 GCQGGPCRADIKCGSQAGGKLCNNLCCSQWGFCLGSEFCGGGCQSGACSTDKPCGK
DAGGRVCTNNYCCSKWGSCGIGPGYCGAGCQSGGCDGVFAEAITANSTLLQE

40

WGA2 (D) cDNA sequence:

atgaga aagatgatga gcaccatggc cettacgctc ggcgcggctg tcttcctcgc
cttcgccgcg gcgaccgcgc aggccagag gtgcggcgag cagggcagca
45 acatggagtg
ccccaaacaac ctctgctgca gccagtacgg gtactgcggc atgggcggcg
actactgcgg
caagggtgc cagaacggcg cctgctggac cagcaagcgc tgcggcagcc
aggccggcg
50 ggcgacgtgt cccaacaacc actgctgcag ccagtacggg cactgcggct

tcggagccga
 301 gtactgcggc gccggctgcc agggcgcccc ctgccgcgcc gacatcaagt
 gcggcagcca
 361 gtccggcggc aagctatgcc cgaacaacct ctgctgcagc cagtggggat
 5 tctgcggcct
 421 aggttccgag ttctgcggcg gtggctgccg gagcgggtgt tgcagcaccg
 acaagccgtg
 481 cggcaaggac gccggcgcca gggtttgac taacaactac tgtttagca
 agtggggatc
 10 541 ctgtggcatc ggcccgggct attgcgggtgc aggctgccag agcggcggct
 gtgacgctgt
 601 ctttgcggc gccatcaccg ccaactccac tcttctgca gaatga

WGA2 (D) protein sequence:

15 MRKMMSTMALTLGAAVFLAFAAATAQAQRCGEQGSNMECPNNLC
 CSQYGYCGMGDYCGKGCQNGACWTSKRCGSQAGGATCPNNHCCSQYGHCGFGAEYCG
 20 AGCQGGPCRADIKGSQSGGKLCNNLCCSQWGFCLGSEFCGGGCQSGACSTDKPCG
 KDAGGRVCTNNYCCSKWGSCGIGPGYCGAGCQSGGCDVFAITANSTLLAE

WGA3 (B) cDNA sequence:

25 caaaggtgcg gcgagcaggg cagcggcatg gactgcccc acaacctgtg ctgcagccag
 61 tacggctact gcgggatggg cggcgattac tgcggcaagg gctgccagaa
 cggcgcggtg
 121 tggaccagca agcgggtgtg cagccaggcc ggcggcaaga cgtgccccaa
 30 caaccactgc
 181 tgcagccagt acgggcactg cggcttcggc ggcggagtact gcggcgccgg
 ctgccagggc
 241 ggcccctgcc gcgccgacat caagtgcggc agccaggccg gcggcaagct
 gtgccccaac
 35 301 aacctctgct gcagccagtg ggggtactgc ggccctcgggt ccgagttctg
 cggcgagggc
 361 tgccagaacg gcgcttgca caccgacaag ccgtgtggca aggacgccgg
 cggcagggtt
 421 tgcactaaca actactgctg tagcaagtgg ggatcctgtg gcatcgggtc
 40 cggctactgc
 481 ggtgcaggct gccagagcgg cggctgcgat ggtgtcttcg ccgaggccat
 cggcaccaac
 541 tccactcttc tcgcagaatga

WGA3 (B) protein sequence:

45 QRCGEQSGMECPNNLCCSQYGYCGMGDYCGKGCQNGACWTSK
 RCGSQAGGKTCNNHCCSQYGHCGFGAEYCGAGCQGGPCRADIKGSQAGGKLCNNL
 50 CCSQWGYCGLGSEFCGEGCQNGACSTDKPCGKDAGGRVCTNNYCCSKWGSCGIGPGYC

GAGCQSGGCDGVFAEAIATNSTLLAE